

# THE MEDICAL AND SURGICAL REPORTER.

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## ORIGINAL DEPARTMENT.

### Communications.

#### MYDNIASIS AND PARALYSIS OF ACCOMMODATION PERMANENTLY CURED BY THE USE OF CALABAR BEAN.

By P. D. KEYSER, M. D.,

Surgeon to the Philadelphia Ophthalmic Dispensary.

It is the confirmed opinion of all observers, that the Calabar bean acts powerfully on the accommodation of the eye, and is antagonistic to atrophine, by having the power of contracting the pupil. It has been shown by Mr. C. J. WORKMAN, that in its action the accommodation seems to be affected before the iris; and that the effect lasts longer on the iris than on the ciliary muscle. But that seldom permanent good can be expected from its use, as he mentions but one case where there seemed to be permanency of improvement; and in that case he writes only sixteen days after the extract was applied.

I have two cases of really permanent cure from its use to report:

March 6th, 1865. Cornelia M., aged 9 years, came with her sister, whom I was treating for phlyctenular conjunctivitis, to the Philadelphia Eye Dispensary, and upon entering the room, I noticed that the pupil of her right eye was very much dilated. Upon examination, I saw a small scar upon the outer edge of the cornea, and found complete paralysis of accommodation. The patient was a smart active girl, and answered readily and promptly all questions I put to her. I learned from her mother and sister, that when she was an infant, a fork was accidentally run in the outer side of the cornea, but without touching the lens, and that the pupil has remained dilated ever since, with loss of accommodation, now nearly eight years.

I put a small square of the celebrated gelatine made by ALLEN & HANBURY, London, in the eye.

March 8th. Pupil somewhat smaller, and accommodation improved. A small square of the gelatine again put in.

March 10th. Pupil the same size as the left

eye, and accommodation perfect. Put another square in.

Returned, March 15th, with pupil and accommodation perfect.

I have seen the patient almost weekly ever since, and pupil and accommodation are still perfect, now, seven months after the application of the extract.

Another interesting case is that of Mrs. C. U., aged 41 years, who came under my care at the Eye Dispensary, Feb. 3, 1865, with paralysis of the oculo-motor nerve.

When the patient presented herself for treatment, the upper lid of the left eye was hanging down, and the outer caruncle considerably lower than that of the other side, (perfect ptosis.) Upon endeavoring to open the eye, a slight upward movement of the eyelid remained, caused by the musculus orbicularis palpebrarum, which is governed by the facial nerve, relaxing itself still more. Upon raising the paralyzed lid, the pupil was found dilated, the cornea turned well outward, and, on looking toward the right side, it could not be brought to the centre of the palpebral fissure, showing paralysis of the internal rectus muscle. On attempting to look upward, not the least movement was perceptible, showing paralysis of the superior rectus and inferior oblique muscles. On looking downward, the superior oblique muscle, which is governed by the N. trochlearis, alone acted, making a slight rotation around the visual axis, rather than a downward movement. Accommodation was paralyzed. There was considerable tenderness of the skin around the eye.

The whole affection came on suddenly about a month before. She went to bed well, and, on rising the next morning, found it was impossible to open the eye. From the history of the patient no syphilitic affection could be discovered.

The diagnosis was that of a rheumatic affection.

She was ordered a teaspoonful of vinum ergotæ three times daily, and to rub around the eye veratri salve—10 gr. : ʒi.

Feb. 15th. Can raise the lid half-way. The tenderness of the skin has disappeared.

Feb. 28th. Can open the eye full three-fourths.

Has regained power enough in the internal rectus to draw the cornea to the middle of the palpebral fissure; pupil still dilated, and accommodation imperfect; put a small square of the calabarized gelatine in the eye.

March 17th. Can open the eye full, and move the ball in every direction, but still not perfect command over the recti muscles. Pupil smaller, and accommodation much better. Put a slip of the gelatine in.

April 1st. Has complete power over the muscles of the lids and ball. Pupil still some little dilated. A slip of the gelatine again put in.

April 15th. Eye perfect. Has full power over all the muscles. Pupil normal, and accommodation good.

I saw the patient every few weeks, up to August, when I lost sight of her. When last seen, was on the street, and the eye was still perfect; pupil and accommodation normal.

It will be seen that these are two marked cases, and from the success arrived at, that permanent good, not only may be expected, but can be had by the use of the Calabar bean in some cases of dilatation of the pupil and paralysis of accommodation.

#### SULPHATE OF ZINC IN BURNS AND SCALDS.

By FLINT L. KEYES, M. D.,

Of Jerseyville, Canada West.

To manage burns and scalds properly must be an object of primary importance; yet, doubt and apprehension pervade the mind of the practitioner, as he approaches such injuries, to a greater extent than any other which may become the subject of his attention. The reason of this is obvious. From time immemorial, this subject has been clothed with a peculiar mystery. Each writer has his peculiar classification, and the treatment even at the present day is obviously of the most opposite and diversified character. In fact, he is surrounded by a hundred and one domestic appliances, besides the diversified opinions of his medical contemporaries.

It is not my intention to speak of the various forms of burns, the phenomena by which they are characterized, or the effects to which they may give rise, when severe, neglected, or injudiciously managed. This has been so often and ably done by medical and surgical writers, who may be consulted by every medical man at his leisure, that it would be only presumption to occupy the time of the reader with an unnecessary repetition, to which nothing could be added. My object is to call attention to a form of treatment

which is simple, easy to be adopted, and as far as my experience with it has been pursued, not to be objected to on the ground of its therapeutic value, but on the contrary, my own confidence in it has been strengthened. Much time is saved, as well as giving to the patient almost immediate relief. I allude to the use of sulphate of zinc, and the mode of applying it to the surface of parts, either burn or scald. The solution may be varied in strength to suit the various conditions of the case in its exigencies. Three grains to an ounce of water is about the strength I have used it, at the first dressing. Soft cotton or linen cloths should be dipped into this solution, then cover the part or parts burned smoothly with them, avoid wrinkling as much as possible, and where practicable, apply a roller lightly; if not, have the dressings watched by a nurse, if they should get displaced, let the attendant adjust them immediately; when they get partially dry, they should be moistened, this is done without removing them; dip a sponge or cloth into part of the solution, (this will keep the bulk of the solution clean,) and wet the whole over by dribbling it, this is to be repeated as often as necessary to keep sufficiently moist, otherwise the cloth would become dry, and adhere to the injured part. If the patient should shiver when the solution is put on cold, it may be warmed by placing it in a bowl of warm water, or other large vessel, until it shall become sufficiently warm to be comfortable to the patient. In superficial burns or scalds, one dressing may answer, if the lesion, however, should involve the deeper layers of the skin, or extend entirely through its substance, it should be renewed every twenty-four hours, and clean cloths substituted, until the lesion is entirely healed. This has been the only treatment I have made use of for the last sixteen or seventeen years, either to slight or the more severe injuries. I know of no remedy which will fulfil every indication so efficiently as this, with so little trouble.

Here let me remark, we have but one exception to its use—burns by gunpowder. When a charge of powder is fired, or a quantity confined in paper is ignited by accident, near an exposed part of the body, a portion of the unburnt powder is deposited in the skin, proportionately to the imperfection of combustion and coarseness of the granules. In such a case, the wash would be inadmissible, as it would act as a solvent to those granules which could not be conveniently removed, consequently, the irritation would increase the consequent inflammation to a high degree, and would be a great hindrance to recovery.

In these cases I should give preference to the carbonate of lead in the form of paint, as recommended by Prof. S. D. Gross, M. D. In all other cases, I prefer the zinc. It is portable, can be always at hand, and is quickly prepared for use in all cases of emergency. It is also reliable.

It is not difficult to determine the mode by which the sulphate of zinc produces its beneficial effects in this class of injuries, it prevents partially the contact of the atmosphere, at the same time, by its astringent properties, constricts the capillary vessels, allays pain, stops the formation of vesicles, and promotes a more speedy termination of inflammation by resolution. I have seen patients literally agonized with suffering, become perfectly composed in fifteen or twenty minutes after the burnt surface was thoroughly covered by this dressing, and it entirely overcomes the annoyance of intermeddlers in the progress of cure, which is a great relief to the physician in attendance, especially in country practice, where the knowing ones generally congregate to dispense their whims.

#### CASE OF GUNSHOT WOUND THROUGH THE LUNGS.

By P. J. FARNSWORTH,

Of Lyons, Iowa.

John C., private in 26th regiment Iowa Vols., of strong constitution, a native of Ireland, was wounded at the battle of Arkansas Post, January 11th, 1863. The bullet entered in front of the left shoulder, below the clavicle, and above the first rib, just in front of the joint, passing obliquely backward and downward, and coming out at the right of the spinous process of the fifth or sixth dorsal vertebra. Evidently passing obliquely through the upper part of the lobe of the left lung.

From his own account, there was not much hemorrhage. He expectorated a considerable quantity of blood, and experienced a very severe pain in the left side. He was removed to the hospital, where little attention was paid him, except some adhesive plaster placed over the wounds. The obliquity of the external wounds seemed to prevent the admission of external air. The surgeon evidently considered it a hopeless case, and paid little attention to him, so that after a month, he had become very much bent over, forward and laterally. He was then sent to the hospital at Keokuk, where he remained for two months longer, when he was discharged, and sent home.

His appearance, when he first came into our

hands, was of extreme emaciation. The left shoulder dropped down, and the spine bent forward and sidewise. The wound in front was healed, but the one on the back was open, and when he coughed violently, air escaped. The cough was troublesome; the expectoration bloody pus, in large quantities. The whole aspect was that of the last stages of tubercular disease. He had night-sweats, and swelling of the lower extremities, and a peculiar clubbing of the fingers.

We gave him cod-liver oil and stimulants, and as generous a diet as he would bear. He lingered along for two or three months, with slight improvement. There was every indication of tubercular disease, and of a large cavity in the lung. A Soldiers' Home being opened in Chicago, we obtained permission to send him there, he having no friends here. We procured a carriage and carried him carefully to the depot, and saw him aboard a sleeping-car, never expecting to see him again.

This was in August, and we heard no more from him until December, when he returned, in the uniform of an invalid veteran. His appearance was much improved, and he informed us that he did regular guard duty, over the rebel prisoners at Camp Douglass. He was not quite well, but much of the cachectic look had passed away. The wound on the back had healed, and he was not much troubled with cough. The clubbed appearance of the fingers had disappeared, and he had become straight. His duties were light, and he was able to perform them.

He is now here; having been lately discharged, and is in good health. There is a little dulness over the left lung, but nothing more. He informed us that he was in hospital but once after re-enlisting, about eleven months after he was wounded.

The points of interest in the case, are the appearance put on from an evidently severe wound through the lungs, and the apparent entire recovery therefrom.

The entire recovery did not take place in the eleven months, for when re-enlisted, he must have been far from well and only fit for the lightest duty; but, before the term of his enlistment expired, he was fit for field duty, and to all appearance is now in perfect health.

#### Ophthalmia in the Belgian Army.

In twenty-five years, between 1814 and 1839, the Belgian army of 50,000 men has produced 100,000 cases of ophthalmia.

## Hospital Reports.

JEFFERSON MEDICAL COLLEGE, }  
November.

### SURGICAL CLINIC OF PROF. GROSS.

Reported by W. W. Keen, Jr., M. D.

#### Ankylosis of the Knee.

Nov. 2. Henry G. M., *set.* 22, farmer. When a boy of 13 he was hurt in the left knee internally, by a corn-cutter. The scar is left, but whether the wound penetrated to the joint, I cannot discover. He was in bed some three or four months, and on getting up in the spring, the knee was ankylosed say at an angle of 130°. He walked without crutches, however, and did his day's work with the rest, at haymaking, etc. His general health, therefore is capital.

I made a small puncture externally, and with a chisel, perforators, hammer, etc., I broke the bone into pieces at the joint, between the tibia and femur. I gave him morph., gr.  $\frac{1}{2}$ , applied acetate of lead and opium to the joint, and placed it in a fracture-box with a double inclined plane, at an increased angle to the old one, and making extension and counter-extension.

Nov. 30th. He has had scarcely any pain in the knee. Gradually, the angle of the splint has been increased, and it is now almost straight. The adhesive strip was only removed from the incision I made to-day, and there has been no inflammation, I gave chloroform and instituted passive motion. The fragments grated considerably in the joint, but there was considerable movement.

Dec. 28th. Every two or three days I have made passive motion, and it has now a motion of 90°, with less grating. It is followed by soreness, which however is kept in admirable control by the acetate of lead and opium, and by friction with alcohol and water.

Jan. 2d. Discharged with somewhat more mobility, with directions to his physician to continue the treatment.

#### Umbilical Hernia.

Nov. 9. John T. C., *set.* 10. Good constitution; excellent general health. The hernia is congenital, and was then very small. Since then it has increased, until it is now a pendulous conical tumor, larger than a large egg. The skin is much attenuated, bluish at some points, the subcutaneous veins being somewhat enlarged. Where the tumor presses against the skin of the abdomen, the skin of both is red and almost excoriated. He has pain occasionally, of a colicky nature, and then, by his father's account,

the tumor is enlarged and very hard, and he is also very costive. He is not ordinarily costive; nor does the tumor increase perceptibly after meals. It is irreducible, and to the touch doughy throughout its whole extent. The opening in the abdominal walls is very slight. Probably it is omentum.

I could only advise. I advised excision of the body of the tumor, leaving its base as a plug, or else the wearing of a support, such as a gum-elastic bag, with attention to the bowels and diet.

#### Chronic Hiccup.

Nov. 16. Eliz. M., *set.* 26. She has had the hiccup for nine months. It comes on every 5 or 15 minutes in spasms, when she hiccups loudly four or five times. It often wakes her up after going to bed. She can lie only on the right side. It is worse in the evening, when fever also accompanies it. She has no headache nor thirst. Her tongue is clean; her bowels somewhat costive; menstrual function regular. She has no appetite. She has great dyspnea; soreness all over the chest, apparently nervous, in part, at least; and she suffers greatly from palpitation of the heart. On percussion, the lungs were clear, the heart normal. On auscultation, there was rude respiration on the left side; the sounds of the heart were normal.

I ordered

R. Pil. hydrarg.,  
Ext. colocynth. comp.,  
Jal.  $\mathfrak{ss}$ , aa gr. viij.  
Ipec. gr. j. M.

ft. pil. in no. v. S. One every three hours. Also

R. Quinæ sulph., gr. v.  
Morphiæ sulph., gr.  $\frac{1}{2}$ .

twice daily.

Also blister the præcordia and epigastrium, covering the blister with morphiæ sulphat., gr. iij.

Also succus limonis recent,  $\mathfrak{z}$ ij. Six or eight times daily.

#### Strumous Ophthalmia.

Nov. 16th. Sarah C., *set.* 15. Very large and well-developed for her age. The menstrual function has not appeared. For eight years her eyes have been sore. Her eyes were some time ago entirely intolerant of light, but now she can bear it for a very short time. There is great lachrymation, so that the tears run over the cheeks. The lids adhere firmly in the morning. They are inflamed on the inner surface, and there is congestion of the conjunctiva.

I ordered regular purgation every 4th night as follows:

R. Pil. hydrarg., gr. v.  
Ext. colocynth comp., gr. iij.  
Aloes, gr. ij.  
Antim. et potass. tart., gr. 1-16.



Also

R. Magnes. sulph.  
 Antim. et potass. tart.  
 Quinise sulph., gr. iss.  
 Acid sulphur. aromat., gtt. ij.  
 Morphise sulph., gr. 1-16.  
 Tinct. verat. vir., gtt. iij. M.

S. Take four times daily.

Also an eye-wash of sassafras pith tea.

Also

R. Unguent hydrarg. nitrat., gr. x.  
 Cerat. simp., gr. lx.

S. To be applied by a brush to the lids every night.

I also directed a light diet; no meat. She must wear a thick veil; dance none; take gentle exercise, with good warm flannel clothing; and must wash daily her body with water and salt or mustard.

**Phosphor-Necrosis.***Excision of the Inferior Maxilla.*

Nov. 20th. James McK., æt. 40. His general health is only passable. He has worked for 20 years in a lucifer match manufactory, where phosphorus is largely used. Five years ago the disease commenced, with what was supposed to be toothache, and he had two teeth removed. Soon the gums swelled, the teeth became loose and painful on eating, and the saliva flowed very freely, indeed there was every appearance of salivation. The lower jaw bone soon was evidently involved, and four years ago, the right third of it was removed, the right cheek being very much enlarged also.

The enlargement of the cheek subsided, and he continued in the factory. Last spring, the same symptoms reappeared, and the remaining two-thirds of the bone became carious. The breath is very fetid, and of a peculiar odor characteristic of phosphoric caries. The lower jaw has lost all its teeth, the alveoli in front are denuded of the gum; the left cheek is enlarged and very hard. On probing by some ulcerations just below the angle of the jaw, dead bone was easily felt.

I made an incision from in front of the ear to near the angle of the mouth, and with considerable difficulty removed the remaining two-thirds of the bone in two portions. From the genial tubercles there was an exostosis very much like a lumbar spinous process, some one half inch square, on which the muscles of the tongue were inserted very firmly. The parts, especially the hypertrophied left cheek, were very vascular, and the muscles surrounding the bone hardened and brittle. The hemorrhage was very troublesome, Monro's salt having but little effect on it; but

it was finally subdued by ice. I dressed it with simple adhesive strips, after approximating the edges with the wire (silver) suture. I ordered him stimulants, punch, oyster soup, etc., with morphia, gr.  $\frac{1}{4}$ .

21st. He has slept well and suffered very little. Suppuration has already begun. His strength is good.

22d. In consequence of the fetid suppuration, his mouth is rinsed out by Labarraque's solution diluted. Stimulants still kept up. Strength excellent.

26th. Strenght excellent. Considerable œdema of the lips and eyelids, from his constantly lying on the right side. Dressed the wound with ung. zinci oxidi, after washing still with the Labarraque.

30th. The pus is healthy, the granulations excellent. Discontinued the use of the Labarraque as the fetor is gone. His strength is not quite so good to-day. (6 P. M.)

After the above note, at 9 P. M., a distinct rigor set in, accompanied with pain in the abdomen and rapid loss of strength. I applied a mustard plaster to the abdomen, and gave him whiskey in milk punch freely.

Dec. 1. He has sunk rapidly to-day. Hiccup set in toward night, and the pain in the abdomen increased; the pulse has become frequent, quick, and thready; the wound also looks badly. Suppuration has stopped almost entirely, and instead of being covered with a thick, yellow pus, as it was yesterday, the pus is thin, watery, and of a dirty-grey color. The edges of the wound too are unhealthy and gaping. Everything tends to the diagnosis of pyæmia, and a very unfavorable prognosis. I stimulated more freely by brandy, sinapisms, etc.

2d. The unfavorable symptoms became still more so, coma set in by 10 A. M., and at 2 P. M. he died. Very quickly following death, the skin became of a marked yellow tinge.

*Post-mortem Examination.* This was held at 11 P. M.—nine hours after death. On examining the wound, the hypertrophied cheek was found united firmly to the jaw, almost from the angle of the mouth to the ear, but the portion of the wound in the lip gaped widely externally, and was only slightly united from within. The upper jaw was necrosed above the molar teeth, especially on the left side. The mucous membrane of the mouth was covered with an unhealthy pus, as was also that of the fauces.

On opening the chest, old pleuritic adhesions were found on both sides.

The lungs.—The right lung, posteriorly and

internally was filled with diffuse abscesses, while the whole of the left lung was thus infiltrated. There was not one circumscribed abscess. Each of them floated in water.

The *heart* was healthy throughout, and nothing was remarked save the presence, in both auricles and ventricles, of very firm and large clots of fibrin, which was nearly colorless and so tenacious as to extend into the auricular appendages and the arteries and veins, whence it was withdrawn.

The *abdomen* was tympanitic. On opening it, the *peritoneum* was found in a state of congestion and inflammation, in both its parietal and visceral layers, and the intestines were bathed in pus, amounting to some f.3 iv.

The *liver* was considerably enlarged, a little softened perhaps, and in a state of high congestion, but no abscesses existed in it.

The *gall bladder* was very large, and filled with f.3 iij. of dark uncoagulated blood, tinged with, and swelling of bile.

The *kidneys* were healthy.

The *pancreas* was rather soft and friable; otherwise natural.

The *spleen* was somewhat enlarged, highly congested, even of a black color anteriorly, and there was quite a large circumscribed abscess near the hilus.

The *stomach* was coated with unhealthy pus—some of it possibly swallowed—and its mucous surface was dotted with small ulcers, especially along the smaller curvature and toward the pyloric orifice.

The *small intestines* were softened, so that in separating the duodenum from the surrounding parts, the walls continually gave way, and its dark, offensive, greenish-black, semi-fluid contents were extravasated. The mucous membrane was congested and inflamed, and this, as well as the softening, was most prominent in the duodenum and ileum. In the ileum, near the ileo-cæcal valve, were a number of distinct ulcers.

The *fat* behind the colon was in a state of supuration.

The *large intestines* were congested and inflamed on the mucous surface, as the small intestines. In the descending colon, particularly, this was the case, and ulcers were formed here, some of which had perforated the sigmoid flexure, making a large aperture into the peritoneal cavity.

The *rectum* was partly filled with impacted feces.

#### Scirrhus of Skin.

##### Shoulder—eight years duration.

Nov. 20th. George W. C., æt. 26. Strong and healthy; a private in Young's Kentucky Cavalry. For eight years he has had on the left shoulder a small tumor on the skin, a little larger than a dime. It arose without any assignable cause. It is in the substance of the skin, perfectly movable, is elevated and hard, and its surface glistening, and not ulcerated. It is the seat of sharp, pricking, lancinating pains.

I excised it, and dressed with sutures and adhesive strips. Dieted him, kept him quiet, and attended to his bowels.

27th. Doing well. Removed the sutures.

30th. By exercise, contrary to orders, the wound is somewhat gaping. Dressed by adhesive strips and ung. zinci oxidi.

Dec. 14th. Almost entirely cicatrised; having already granulated.

Dec. 28th. Discharged entirely well.

#### Encysted Tumor of the Lip.

Nov. 20th. Annie K., æt. 15, in excellent general health. She has a small tumor, of the size of a five cent piece, on the lower lip, just within its margin, on the right side. She has had it for two years, with little pain, save when injury is inflicted upon it in eating, etc. Its appearance is translucent, and somewhat dark.

I excised it readily, and found it to be encysted, with a thick,ropy, and rather dark colored, but transparent fluid. I simply attended to the bowels and diet. I put on no dressing.

21st. She is doing well; the wound healing by the first intention.

#### Caries of Rib.

Nov. 23d. Wm. H., æt. 28. On the 5th of last June I operated for a fistula, extending to the fifth rib and costal cartilage, with softening of the periosteum and perichondrium. I scraped the bone, took away the carious portion of it, and it healed readily. There is now a sinus extending to the sixth rib and costal cartilage, on a line with the nipple (perpendicularly). It is attended with some discharge. I laid the rib and cartilage bare, and after scraping it thoroughly, dressed the wound with adhesive plaster and wire suture, warm water dressings, and bandage.

27th. Doing well. Some little discharge from the deeper structures. Dressed with oxide of zinc ointment and adhesive strips.

Dec. 21st. Entirely healed.

#### Onanism.

Nov. 22d. Henry H., æt. 19. Has been in the habit for two or three years, three or four times

a week. He now finds some difficulty in commanding an erection. He has no pleasurable feelings at the time. He also suffers from nocturnal emissions—two or three per week, excited by dreams early in the morning, when lying on his back. The scrotum is not relaxed, so far as he is aware, nor does it perspire unnaturally. He has no incontinence of urine. His general health is good—appetite good; but he suffers from vertigo. He has no headache, no noises in the ears. His memory is considerably impaired; his vision is confused, and he often sees black spots in reading. He is drowsy in the day time; has cold feet and hands; pains in the back and spermatic cord. He is nervous, and easily scared.

On passing a catheter, the prostatic portion of the urethra was found to be excessively tender. I cauterised that part of the urethra, and ordered him the antimonial and saline mixture. Light diet; a hard bed; he must rise immediately on waking; take gentle exercise, and go into society; and above all, must refrain from his evil habit.

#### Hydrocele.

Nov. 27th. James W., set. 50, is a sexton. Four months ago he fell some 14 or 16 feet, and injured the right testicle, and a tumor rapidly developed, especially of late. It now extends up to the groin; is nearly as large as the fist; of an egg-shape; soft and elastic, with distinct fluctuation. He has pain in it, especially when sitting down. The cord is sound; the subcutaneous veins enlarged. The tumor has a peculiar translucent appearance. It never disappears. He has never had a hernia.

I punctured the sac, and evacuated some five or six ounces of a deep straw-colored coagulable fluid. I then with a camel's hair brush introduced the dilute tincture of iodine into the sac.

Dec. 4th. Some pain and inflammation supervened, but it yielded readily to acetate of lead and opium.

11th. Entirely well.

#### Fracture of Skull.

Nov. 30th. Charles M., set. 10 months. On the 24th inst. he fell from the sofa, and struck his head. He complained but little; has had no vomiting nor fainting. He has only had a little pain in it. There is now a large tumor a little posterior and inferior to the left parietal boss, of the size of half a large orange, which by the exploring needle proves to be bloody. Its walls are very tense.

R. Ammon. chlorid., 3ij.

S. Add to four tablespoonfuls of vinegar and

a quart of water, and apply over the tumor, with friction, three times a day.

Dec. 7th. The tumor is largely decreased, and its walls are far less tense. On feeling it I was surprised to find a sharp projecting edge of bone, evidently the edges of a fracture. The depression is of the size of half a dollar. There have been yet no signs of compression of the brain, notwithstanding so large a piece is depressed. The child takes the breast well. Treatment continued.

18th. The tumor is entirely gone, and the bone is felt depressed very markedly. Strabismus is present to a slight degree, but whether it has supervened upon the injury or existed previously, the mother is not observant enough to know.

No further treatment at present.

#### Enlarged Axillary Gland.

Nov. 30th. Catherine I., set. 28. The tumor is now as large as a walnut. It began four years ago, in the left axilla. She has no pain. It is non-adherent. Under the skin can be felt a pulsating artery. When she gets cold the glands under the inferior maxillary bone become enlarged. The prominent point of it is elastic, but the exploring needle failed to show any fluid. Since she is nursing a child I forbore to open it, trusting to its being absorbed, or else forming an abscess. I therefore ordered

R. Tinc. iodinii, f.ʒj.  
Alcohol, f.ʒj.

S. Apply every night.

R. Pilul. hydrarg., gr. v.  
Ext. colocynth. comp., gr. v.

S. Every other night.

R. Liq. barii chlorid., gtt. vj.,

three times a day; adding a drop every other day till she has reached ten, and then after a respite of three days, beginning at six drops again.

## EDITORIAL DEPARTMENT.

### Periscope.

#### The Relations of Variola to Vaccinia. Animal Vaccination.

If there is any one point in the pathology of variola and vaccinia which we have considered established beyond a question, it is the opinion that vaccinia is modified variola. That both are identical in nature, the former being the product of the latter acting upon the cow or horse, but modified by the constitution of these animals to such a degree that its introduction into the human system from such a source is entirely innocuous, while it establishes a disease so nearly allied to variola as to exclude that disease, in most cases,

from any future occupation of the constitution thus occupied. It would seem, however, that the French Academy of Medicine are not satisfied with the results obtained by experimenters heretofore, and having examined the subject *de novo*, they have come to conclusions directly opposite to those usually claimed to result from similar experiments. It is true that in rare instances the inoculation of the cow with small-pox virus, and the subsequent inoculation of the human subject with virus from the produced pustule, has led to the development of small-pox instead of the expected vaccine disease. If the results of the Academy's experiments are to be depended upon, however, the method which has been thought to furnish the readiest means of obtaining a supply of vaccine matter in an emergency, at a distance from any source of supply, namely, that of inoculating the cow with small-pox matter, and taking from the produced pustules matter for purposes of vaccination, is entirely unreliable. It is hard to explain the incongruity of the results contained in the report to the Academy and those published in medical works of acknowledged authority. It is possible that some unappreciated influence of season or diathesis interfered with the ordinary action of the small-pox virus experimented with. Certain it is that this question cannot be suffered to remain involved in any new obscurity—thrown about it by so authoritative a body as the French Academy. We hope to see before long confutation or confirmation from some other source, together with some reasonable theory to account for the impressions which have at the present time so firm a hold on professional opinion. We find the results referred to reported in the *Archives Générales de Médecine* for July. It is there stated that at the session of the French Academy of Medicine held May 30th, M. CHAUVEAU communicated the principal results of his experimental researches on this important subject.

These experiments, undertaken at first in consequence of a discussion in the Academy on this question, by a commission of which he was a member, with Messrs. VIENNOIS and MEYNET, are recorded in a report read to the Society of Medical Sciences of Lyons. It was an analysis of this report that M. CHAUVEAU presented to the Academy.

The Commission has studied principally in the two principal vaccine-bearing and vaccine-generating animals—the ox and the horse—the effects of vaccine and variolous inoculation.

M. CHAUVEAU sums up in these terms the results and conclusions of these experiments:

1. Human variola is inoculated on the cow and horse with the same certainty as vaccinia.

2. The effects produced by inoculation of the two diseases are entirely unlike.

In the cow, variola produces merely an eruption of papules, so small that they would escape observation, if attention had not been called to their existence. Vaccinia, on the contrary, produces a vaccine eruption, the typical form of which is large and well-characterized pustules. In the horse there is also a papular eruption, without secretion or crusts, produced by variola; but, although this may be much more severe than

that of the cow, it could never be confounded with the horse-pox, so remarkable for the abundance of the secretion and the thickness of the crusts.

3. Vaccinia inoculated singly upon animals of the bovine and equine species, protects them generally from variola.

4. Variola inoculated upon the same animals generally prevents a subsequent development of vaccinia.

5. Cultivated methodically upon these same animals, that is to say, transmitted from cow to cow, or from horse to horse, variola does not approach in characters to the vaccine eruption.

At the same meeting of the Academy, Dr. LANOIX read a paper on Animal Vaccination, containing the results of his experiments since his first communication, in October last. The following are the principal results announced:

In a first suite of re-vaccinations, done at the Lyceum of the Prince Impérial, 180 children from 9 to 12½ years of age were re-vaccinated; and of this number there were 63 in whom the vaccination produced good vaccine pustules.

In a second suite, 200 younger children, from 7 to 9 years of age, were vaccinated. In 20 only of them was a good vaccine produced. In all there were 80 successful vaccinations out of the 380 re-vaccinated; that is to say, 20 to the 100.

Two months after, Dr. MICHEL, Physician to the Institution of Fontenay, re-vaccinated all the children of that College with animal vaccine. Out of 400 children 76 had a good vaccine disease. Adding to the above figures 40 other re-vaccinations practised on children from 7 to 13 years of age, we have a total of 820 re-vaccinations, of which 159 were successful, or 21 to the 100.

M. LANOIX also reports the results obtained by M. DHÉRE in a young girls' boarding-school, and published in the *Gazette des Hôpitaux*, March 2d, 1865.

Re-vaccination in subjects from 14 to 20 years old, to the number of 71, gave 31 cases of success. In adults from 20 to 40, the number of cases of successful vaccinations was 97 to 200. There were 7 in 30 subjects, from 40 to 50 years old. Finally, of 5 persons from 50 to 60 years old, 2 were successfully re-vaccinated.

Finally, the author expresses his confidence in the results obtained by M. NEGRI. "As I was six months ago," he says, "and even more convinced now, I come to tell you that the transmission of vaccinia from heifer to heifer is always possible, and with such ease as to supply the needs of a large practice. That the vaccine does not grow weak, but that its activity is longer preserved, with more certainty, in its passage through the animal organism than through the human. That such vaccinations give always, or almost always, a positive result; re-vaccinations an average of success superior to the average of success produced by human vaccine lymph. That vaccination with virus from the heifer is easy. That it becomes in a time of an epidemic of variola a powerful resource to combat that terrible disease, by reason of the abundance of vaccine matter which may be rapidly conveyed to all



points where it may be required."—*Boston Med. Journal*.

#### The Use of Sulphites in Zymotic Diseases.

Professor R. BARTHOLOW, of Cincinnati, publishes in the *Cincinnati Lancet and Observer*, his "Investigations into the Use of the Sulphites in Zymotic Diseases." To ascertain whether the sulphites passed through the system unchanged, and to determine the therapeutic value of these agents, bisulphite of soda was administered in a variety of cases, and the urine examined, particularly in the following:

A case of hospital gangrene; one of gunshot wound of the perineum, with symptoms of pyæmia; one of scaly eruptive disease of long standing; one of typhoid fever; one of rubella. One to two drachms were given daily. But few physiological effects were marked; pulse and respiration remained unaffected, and there was no departure from the heat wave-line normal to each case. No gaseous eructations, only some gastric uneasiness after each dose. In one case there was nausea and increased peristaltic action. Its chief effect seemed to be diuretic. In all cases the urine was increased in amount, reaching in one instance sixty ounces daily, slightly acid, with an abundant precipitate of urates on cooling. The hydrogen test gave the characteristic reaction with lead paper, but less decisively so than some normal urine used as a standard of comparison, hence the sulphur extractive seemed to be diminished. No sulphurous acid or soluble sulphite could be detected, hence the presumption that it had undergone oxidation, and was present as sulphate. Taking the urinary secretion of the twenty-four hours preceding the administration of the bisulphite of soda as the standard, it was found that the quantity of sulphuric acid rose progressively from 24 to 40 grains. This urine very rapidly underwent the alkaline fermentation after emission.

The therapeutic action of the bisulphite of soda was even less striking than the physiological. In the case of hospital gangrene, the improvement which had begun before the administration of the remedy continued in the same ratio for three days, but the gangrene reappeared on the fourth day, whilst the patient's fluids were saturated with the remedy. Its effect proved injurious by lowering the reparative process. In the other cases no appreciable therapeutic effect was observed. In the case of gunshot wound of the perineum with symptoms of pyæmia, the remedy was withdrawn after the second dose, because the symptoms were found to be due to malarial poisoning, and were quickly relieved by quinia. This case is a type of a large class, and hence peculiarly instructive. It often happens that cases of disease characterized by chills, fever, and perspiration, arising from malarial poisoning, or due to local morbid processes of a benign nature, are mistaken for pyæmia, and the fortunate result ascribed to some remedy employed, supposed to be efficacious in this condition. Still more frequently is the natural progress of a case to the healthy state, or the occurrence of some critical evacuation confounded with the effects of remedies, and in some of these modes the writer is

convinced that the sulphites appeared to confirm the theoretical views on which they are administered.

The author comes to the following conclusions:

"1. The action of the sulphites administered by the stomach, cannot be predicated upon their actions where injected into the vessels.

2. The sulphites undergo oxidation in their passage through the organism, and are converted into sulphates.

3. Their physiological effects in large doses consist in slight irritation of the intestinal mucous surfaces, increased peristaltic action, and increased diuresis—effects produced by the sulphates.

4. Their therapeutic effects, when administered by the stomach, may be represented by  $\frac{0}{1}$ .

5. As a corollary from the views indicated by the author, it is evident that zymotic diseases are propagated by a true fermentation, the sulphates could only be effectual in their cure when administered during the period of incubation, or the true fermentation period, and before the occurrence of the secondary stage—the stage of affection of tissues and organs."

In the same journal, Dr. W. V. V. ROSA, of Watertown, N. Y., publishes a case of *acute puerperal anemia*, which was apparently relieved by the sulphite of lime; but as morphine was given, and had the effect of "quieting the stomach and bowels, and enabling the brain to furnish force for digestion, which immediately recommenced," and pyrophosphate of iron was also added—the recovery of the patient, which it took over two months to accomplish, may be equally due to time, an improved digestion, morphine, and pyrophosphate of iron.

#### Strangulation of the Testis in the Inguinal Canal.

M. VELPEAU had lately under his care a large well made man, aged 37, who was admitted into hospital with symptoms resembling those of strangulated hernia. According to the *Jour. de Méd. et de Chir. Prat.*, he had had, during two hours, severe pain in the groin, and repeated vomiting; there was a swelling in the right inguinal canal, much resembling a hernia. No improvement was produced by the use of a bath for three-quarters of an hour. The tumor was of about the size of an orange, moderately firm, dull on percussion, moveable, and very painful on pressure; it occupied the inguinal region, and the scrotum of the same side was distended with fluid. The patient was ordered to have ice applied to the part, and to take a dose of calomel and jalap. The vomiting and pain disappeared completely ten hours after their commencement. The next day, the swellings in the inguinal canal and in the scrotum still remained. But the former had become soft, flaccid, and painless; it was a little larger than a walnut, and evidently fluid; while the scrotal tumor had acquired a certain degree of hardness, and consisted in part of the testis, lying in the scrotum a little below the ring, and surrounded by a small quantity of fluid. A hydrocele of the inguinal canal had

succeeded the strangulation of the testis. On inquiry, it was found that the patient had been from an early age able to withdraw the testis into the inguinal canal.

#### The Influence of Uterine Displacement on the Sterile Condition.

At the late meeting of the British Medical Association, Dr. J. MARION SIMS, of New York, read a paper on the above subject. The following resumé of which we copy from the *British Medical Journal*.

"Dr. SIMS did not propose to give a complete paper on the subject of sterility, but only to present it in one of its relations—viz., that of its dependence upon misplacements of the uterus. He divided his sterile patients into two classes: 1. Those who are married a sufficient length of time and did not conceive; 2. Those who had borne children, but for some reason ceased to do so long before the termination of the child-bearing period. The first he called "natural sterility;" the second, "acquired sterility." To show the frequency of uterine displacements in this relation, he said that of 250 cases of "natural sterility" that had fallen under his observation, 103 had anteversion, and 68 retroversion; and of 255 cases of "acquired sterility," 61 had anteversion, and 111 retroversion, the anteversions predominating in the first class, the retroversions in the second, the two opposite displacements being almost in inverse proportion in the two classes, and forming about two-thirds of the whole number, being 343 out of 505 cases; which proved beyond question the bearing and importance of these displacements in connection with the sterile condition. He illustrated by diagrams the normal position and relations of the uterus, explained the various causes and complications of anteversion, whether dependent upon fibroid tumours, elongation of the infra- or supra-vaginal cervix, shortening of the utero-sacral ligaments, or hypertrophy of the fundus. In all these cases, he said, not much could be done for the relief of the sterile condition by merely mechanical means; but efforts should be directed to seeing that the os tincæ was properly open, that the canal of the cervix was free from engorgement, and that the secretions, both vaginal and cervical, were not poisonous to the spermatozoa. One form of anteversion was easily cured by a simple operation, which he originated eight or nine years ago. He illustrated this by cases and diagrams. It was as follows. The uterus lies on the anterior wall of the vagina, and parallel with it. The fundus is most usually the seat of a fibroid growing anteriorly. The anterior wall of the vagina is greatly elongated, the os tincæ pointing directly backward. Under these circumstances, he has shortened the anterior wall of the vagina an inch and a-half, by denuding a surface a half-inch wide and two inches long across the axis of the vagina in juxtaposition with the cervix uteri, and making a similar transverse scarification parallel with the first, about an inch and a-half, more or less, anteriorly to it, and then uniting these two transverse cut surfaces by sil-

ver sutures, as in uniting the edges of a transverse vesico-vaginal fistula. This necessarily shortens the elongated anterior wall of the vagina, draws the cervix forward into its normal relation, and as a consequence elevates the fundus. He related several successful cases of this operation, and had seen it followed by conception and child-bearing. He then passed to the consideration of retroversion as influencing the sterile condition, pointed out its varieties and anomalies, and showed how it was to be diagnosed and how replaced. By diagrams he illustrated various modes of reduction, showed how conception was difficult, and sometimes impossible, in some forms of retroversion, advocated mechanical treatment, pointed out the dangers of pessaries, but advocated their use when judiciously applied under proper circumstances. He preferred a malleable ring, either of block tin or a ring of copper wire covered with gutta percha, and then bent or curved to the proper diameters of the vagina of each patient. He said this was a modification of HODGE's pessary. Under some circumstances he also used MZIOS's ring pessary, made of watch-spring covered with gutta-percha. He pointed out the peculiar advantages of each of these, and paid a just tribute to his countrymen, Drs. HODGE and MZIOS, who were the earliest advocates of the mechanical treatment of uterine displacements. The great secret of treating the sterile condition when dependent upon retroversion was to adjust a malleable ring which would hold the uterus in its normal position, and which was to be worn always during the act of coition. He explained its philosophy, its efficiency, its safety, and its harmlessness, and related many cases in which its use had been followed by conception: one after a sterile marriage of six years, another of ten years, another of fifteen years, and others at various periods of time after sterile marriages. He also showed how miscarriages, often dependent upon this displacement, were prevented by the use of a properly fitted malleable pessary. He then pointed out the course to be adopted when it was impossible for the patient to wear a pessary, showing why it was so, and what was to be done.

#### Treatment of Coryza.

M. LUC, an Assistant Surgeon in the French army recommends the inhalation of tincture of iodine in nasal catarrh. "I inhaled tincture of iodine" says he, "from a phial for one minute at a time, at intervals of about three minutes; the heat of my hand was sufficient to promote the evaporation of the iodine; the headache yielded first, sneezing became less frequent, the secretion less copious, and although the inhalation caused a burning sensation in the throat, I was entirely cured at six o'clock P. M., of a cold which from nine A. M. to three P. M. had been sufficiently violent to compel me to use four pocket handkerchiefs."—*Dublin Med. Press*.

M. Luc claims to have had equally good results in several other cases. L

## MEDICAL AND SURGICAL REPORTER.

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## CHANGE OF TYPE IN DISEASE.

The late annual meeting of the British Medical Association has given an opportunity to some of the ablest representatives of British Medicine and Surgery to ventilate their views on that great question which has so extensively occupied the philosophical mind of the profession, embraced in the term "change of type."

In his Address in Medicine, the venerable Regius Professor of the University of Dublin, Dr. STOKES, discusses the subject at length, taking strong ground in favor of the actual periodic change of type in disease, and defending the former practices of blood-letting, etc., as perfectly sound, and demanded by the then sthenic inflammatory type of disease.

The series of arguments and facts adduced by Dr. STOKES, with the exception of one class, to which we shall presently allude, present nothing which has not been repeatedly advanced, and with which the present generation of physicians are not fully conversant. It is, on the one hand, the testimony of the old practitioners, that there was a high inflammatory sthenic tendency, thirty, forty, or fifty years ago, because they *did* resort to violent measures of depletion; and, on the other hand, our respect and veneration for those noble old physicians who have gone before us—a respect and veneration which leads Dr. STOKES to exclaim "it is hard to believe that the fathers of British medicine were always in error," from which have been drawn the main arguments in favor of the change of type.

But, however great our respect, and deep our veneration for our immediate predecessors and fathers in medicine, to say that their practice was as sound, being the very opposite from that of the present day, in the same diseases, is really to reverse the natural order of things, according to all human experience. It is to say that while nature—the physiological laws which govern animal life—is immutable in everything else, and the real changes in the relation of man to these physiological laws consist in the progress of our knowledge of these laws, the practice of medicine alone forms an exception, diseases changing in their type, and the practice of medicine, though the most opposite, being correct at all times and in every century. This is advocating a degree of infallibility of practical medicine which may be pleasing to those who would look upon it with the eye of dogmatic certainty, but which is alike

dangerous and opposed to progress, because it narcotizes us into the belief that our own errors are the errors of nature.

To return to that part of the address of Dr. STOKES which we have indicated as exceptional, inasmuch as it presents a new argument in favor of the change-of-type doctrine, it will be best if we let the able and learned advocate speak for himself.

"The Pathological Society of Dublin has been now established for twenty-six years, during which time it has held weekly meetings, for six months of each year. As one of the secretaries of that Society, I have had full opportunity of seeing and examining the recent examples of diseased structure brought weekly before that body—amounting to nearly 3000 specimens—the collected products of various hospitals of the city, and this result is remarkable, that the specimens of acute disease have had a character very different from that commonly met with in Dublin between 1820 and 1830. As a general rule, these specimens all showed appearances indicative of a less degree of pathologic energy. In pneumonia, for example, the redness, firmness, compactness, and defined boundary of the solidified lung, was seldom seen; and that state of dryness and vivid scarlet injection, to which I ventured to give the name of the first stage of pneumonia, became very rare. In place of these characters, we have a condition more approaching to splenization—the affected parts purple, not bright-red, friable, not firm; moist, not dry; and the whole looking more like the result of diffuse than of energetic and concentrated inflammation; or we had another form, to which Dr. CORRIGAN has given the name of blue pneumonia, in which the structure resembled that of a carnified lung which had been steeped in venous blood." Analogous observations are quoted by Dr. STOKES in regard to inflammations of the serous membranes.

We would most respectfully, but emphatically, dissent from the conclusions drawn from these facts, namely, that they prove or even tend to show any change of type in disease. On the contrary, there are, when we examine further into the matter, certain fixed facts of pathological anatomy which bear strongly against any such hasty conclusion.

Take pneumonia. The whole of the facts adduced on this point proves simply the fact, that of late the cases of death during the first stage of pneumonia have become rare, in comparison to what they were formerly. Change of type has nothing to do with it. Whenever we have a patient die of pneumonia in the first stage, there



we also find the redness, dryness, firmness, vivid scarlet injection, etc., which are indicative, as Dr. STOKES says, of a high degree of pathological energy. And, if a man dies during the second and third stages, we just as invariably find the affected parts more or less approaching splenization—purple, not moist. The appearances of color, solidity, etc., of a pneumonic lung depend not upon some constitutional type, but, as pathologists on this side the Atlantic know, and as is demonstrated to every medical student, on the period which has elapsed between the time of inflammatory effusion and death. If the latter take place early, before the coloring matter of the effusion has been much subjected to disintegration and absorption, then there will be, of course, the appearances of this so-called high pathological action. If the patient die later, when the coloring matter and the effused material have been to a considerable extent removed, the other type is presented. But are these differences really different types? Are they not merely indicative of the stadium to which the disease has regularly progressed?

If it is true that the cases in which the appearances of the first stage of pneumonia are found, have been becoming, in latter years, more and more rare—and we take the testimony of Dr. STOKES as fully conclusive on that point, and experience on this side the Atlantic leads, we believe to the same conclusion—it is, we repeat, a proof that under the modern treatment of the disease, under the abandonment of those violent measures of depletion, there has been a change in this, that fewer people die during the first stage, and that to that extent life has been prolonged.

It is a matter of regret that Professor BENNETT, of Edinburgh, the leader of the opponents of the theory under question, was not there to reply to an attack which was particularly directed against him. However, in Professor SYME, who delivered the Address in Surgery, he found an able exponent. His address alludes only incidentally, but very forcibly, to the subject.

"But before proceeding further, I must entirely dissent from the opinion which was expressed by my respected friend, who addressed you yesterday, that the progress of improvement implied a censure on those who had previously been in error. On the contrary, I have always understood that there was nothing more creditable than the admission of error, and that every man, instead of being ashamed to do so, should be proud of taking a step in advance, whether he leads or follows.

"Commencing with the treatment of inflamma-

tion and its consequences, I may notice a most remarkable difference between the old and the present practice, in the almost entire disuse of bleeding, instead of its nearly constant employment. On looking back, it is indeed difficult to realize the reckless and indiscriminate profusion with which blood was made to flow. When I was one of the dressers of the Royal Infirmary of Edinburgh, two of us went every evening at a stated hour to bleed the patients whose names were entered in a book, with the respective quantities due from each. On one occasion, I recollect of sixty-five ounces taken at once, and followed by thirty-five next day. At present few surgeons carry a lancet, and still fewer ever employ it, so that venesection, instead of being the most frequent, has become one of the rarest operations in surgery. The reason of this is generally said to be a change in the type or condition of the human system, but may, I think, rather be attributed to the influence of more correct ideas in regard to the treatment of disease, since it is certain that operations no less bloody than those of the old time are now performed without any evidence of less ability to bear them.

"Before being appointed House-Surgeon of the Edinburgh Infirmary, I was Medical Superintendent of the Fever Hospital; and then under the direction of the attending physicians, both of whom were professors of the University, I bled men, women, and children, who were brown, emaciated, and reduced to the utmost degree of weakness. Afterward, when House-Surgeon to the Infirmary, I had under my care a boy who suffered from compound fracture of the leg, which gave rise to profuse suppuration; and about three weeks after the injury, seeing that his strength was much exhausted, I ordered him some porter and a beefsteak. But the next day, the Surgeon, who was one of the most largely employed medical men of Edinburgh, disapproved of this, which he said would feed the disease, and directed me to take fourteen ounces of blood from the arm. I obeyed with great reluctance, and need hardly add that before the end of forty-eight hours, the boy was dead. Now, I would ask, could any man at present think of bleeding in such cases as these? And if not, then I say that whatever change there may have been in the type, there certainly has been a change in the practice."

It seems much more logical and in accordance with facts, to suppose that the change in practice has been mainly due to the better knowledge of physiology, pathology, and therapeutics, than that it is owing to a complete revolution in the rela-



tion of morbid influences to animal life. There are changes in the character of disease, originating in temporary fluctuations of epidemic and endemic causes, and which require modifications in our treatment, but so radical a change in practice as that which has taken place during the last quarter of a century, can only be due to the abandonment of previous errors.

#### CHANGE OF TYPE.

In connection with this subject, we note the following item :

In a late number of the *British Medical Journal*, Dr. DESCIEUX has published a pamphlet, in which he asserts "that during the last third, or quarter of a century, the human constitution has undergone a change in France; that diseases have become asthenic; and that, consequently, bleeding is not required now, as formerly. He finds the causes of this change in the immoral state of society, in the ardent love of riches, in sensuality, and in the abandonment of moral and religious principles." On which we remark: There is but one remarkable fact to be added to the list of results of all these influences, which are said to have caused the asthenic type—namely, that in spite thereof, the rate of mortality during the same period has everywhere diminished, and the average duration of human life has been prolonged to a considerable degree. Strange, that men seek for mysterious causes, when the simple plain fact that science has advanced, and old errors have been abandoned, are sufficient to explain everything. Diseases have changed type, because we look upon them with changed views, and treat them differently.

#### PHYSICAL EDUCATION.

Our boys and girls who grow up in large cities are sadly in need of a thorough system of physical training, which shall expand the lungs, strengthen the limbs, and give the muscles a chance to grow, by a freer circulation of the blood through the veins and arteries.

The air which our innocents must breath in a large city is bad enough. But when after the child has reached the years of school-room discipline, to the physical impurities of city life are added a six or seven hours' daily session in a crowded school-room, and several hours of study at home, it is not to be wondered why at the end of such juvenile mal-training, our young men and women are anæmic, nervous, and weak of muscle—physically and morally arrived at premature old age.

We have repeatedly, and for years, advocated a complete change in our present system of pub-

lic education. It is crowd-poisoning physically, and crowd-poisoning mentally. Our school-rooms; as a rule, are neither sufficiently large nor comfortable, nor at all built with a view to thorough ventilation. Just as the rule seems to be, to crowd the largest number of pupils into the smallest possible space, so the plan of instruction is to force as many and different studies at the same time, to the utter neglect of all sound pedagogic rule, and to the great disadvantage of a really sound and rational development of the pupil's mind, and acquisition of real knowledge.

It seems, however, that occasionally our school authorities and the people are getting alarmed at the want of common sense which characterizes their proceedings, and laudable efforts are made to change a state of things, for which there is really no excuse.

At a recent meeting of the Board of School Controllers of this city, the question of introducing physical exercise in our schools was introduced.

A Committee reported "That in their judgment, after due consideration, the best and most economical and most practical method is that which instructs a sufficient number of teachers, not only in the mere exercise of light gymnastics and calisthenics, but also in the theory and principles of their application, so as to produce the most healthful results. The committee therefore suggest that a sufficient number of teachers—in all not more than one from each grammar-school in the district—shall be reported by the several boards for a course of instruction; that those so selected by the several boards shall be divided into two classes—one from the northern part and the other from the southern part of the city—which classes should be under the tuition of the gymnasts signing the communication, and upon the terms stated.

"The committee believes that with one competent instructor in each grammar-school, such exercises may be successfully introduced as may be adapted to the grades of the respective schools and the ages of the pupils; and further, that those teachers instructed on the plan reported, will soon themselves be able to impart information to the other teachers, and thus, before long, the teachers generally will be able to take charge of their respective classes. The expense of instructing the teachers will not exceed the sum of \$3,000, and the cost of the appliances will not exceed \$3,000, or seventy cents per pupil, and the outlay will not be renewed annually. It may not exceed \$1,000 annually. The expense is so small that in reason it cannot be objected to.

"The two High Schools are to be considered in introducing physical exercises; and the respective committees should appoint suitable teachers from those schools, to be instructed with others, for thus the many graduates who come from those institutions will be duly prepared to carry out the system when they may hold the position of teacher.

"The committee reports the following resolutions, and ask their adoption:

"*Resolved*, That the Committee on Estimates for 1866, be directed to include in the annual estimate the sum of \$7,500, for introducing physical exercises into our schools.

"*Resolved*, That a copy of this report and these resolutions be forwarded to Councils, with the request that the Board be authorized to expend \$4,000, payable out of the appropriation of 1866, so as to enable teachers to be instructed, and be ready to teach by the 1st of January, 1866."

Attached to the report is a communication from Dr. WM. JANSSEN, and from Messrs. HILLEBRAND and LEWIS, offering to teach a class of two hundred at ten dollars each, for twenty-four lessons each, of an hour and a half or of two hours duration, once a week. They guarantee to teach the class to such proficiency that they will be able to impart instruction by the first of January, 1866.

These resolutions were passed—not however without some opposition. One of the members of the Board was afraid that too many new things were being introduced, and the scholars would be crowded in their studies. That was a very weak objection; for every minute devoted to physical exercise during school hours, to a little stretching of arms and legs, and a few good pulls of air into the lungs, is really taking some of the pressure off the scholars' over-crowded brain. If we persist in making hot-houses of our childrens' brains, let us be a little merciful, and give them whatever short intervals of physical exercise we can. They will thank us for it, not only in words, but by learning and studying more cheerfully, and to better advantage, and by a little more bloom in their faces, and brighter eyes.

And how necessary this step taken by the Board in reality is, we learn from the discussion on the resolutions. One member did not know where the teaching was going to be held, as there was no room in the schools for exercising gymnastics, when another member explained that the exercises proposed could be taught in the aisles of the school; it was not intended to erect gymnasiums. Of course not. We cannot afford to let our children have room to play. We would rather let future generations pay, in scrofulous

diseases, in weak-limbed, sallow, nervous, feeble prematurely old men and women, a debt which we contract by sheer negligence, and an almost criminal disregard for the physical welfare of our children.

Meanwhile this action of the Board of Controllers promises hope at least, that at some future day the people and its constituted authorities will appreciate the importance of physical training of the young, and secure to them its full advantages, as a regular part of, and means to facilitate the regular course of instruction.

## Notes and Comments.

### Medical Jurisprudence.

We notice in the announcement of the Cleveland Charity Hospital Medical College, that the chair of legal medicine is entrusted to a lawyer, who, for all we know, may be a most excellent member of his profession. But is it possible that no physician can be found to fill that chair? Or is it supposed by the authorities of that school, that a lawyer can really teach medical jurisprudence—a science which demands the highest attainments of chemical, anatomical, physiological and pathological knowledge?

### Cholera.

From the latest European news it appears that the Cholera is on the increase at Marseilles, and that a considerable panic exists there.

Will the municipal authorities throughout the country begin with the good work of removing all nuisances in the shape of filthy streets, unclean sewers, and defective drainage? If done in time, it will save thousands of lives, probably, should the epidemic reach us.

## Correspondence.

### DOMESTIC.

#### Poisonous Effects of Petroleum (Benzole) Gas. EDITOR MED. AND SURGICAL REPORTER:

My attention has just been directed to an article in the last number of your very interesting REPORTER, signed "Student," giving a short history of some cases originating in the oil regions, which to me are quite interesting, as we have a great deal of this kind of difficulty to contend with in this city and vicinity. We are about fifty miles from the land that flows with "Oil," and I have noticed, since its discovery, that the

greater portion of our cases of fever originated in the oil country. The accommodations and comforts for the sick are so limited in the greater portion of the oil country, that as soon as they begin to feel indisposed, they flee for refuge; consequently, the majority of cases originating there, are scattered from East to West, and I am of the opinion that this fact accounts for so many cases of what is called typhoid fever throughout the States at the present time. I have practised medicine in Erie county for the last fifteen years, and am certain that, since the development of oil, our cases of low fever have more than doubled, and are of a very different character. I know they are generally denominated typhoid fever, but I think they differ in some respects from that. There is more irritation of the mucous membranes of the stomach and bowels, producing vomiting, diarrhoea, etc.

A majority of the cases are easily managed and terminate favorably, but occasionally a case occurs which seems stamped with fatality from the onset. I have observed in some of these malignant cases, that the patient would be covered with petechial spots closely allied to the "Spotted Fever" that we meet with occasionally. Another peculiarity of this disease is, in at least one-half of the cases, there is well developed pneumonia of one or both lungs.

Now, there is no doubt in my mind but what the gas produced in the procuring, handling, and refining the petroleum, is a great source of this low form of fever, and now, while I am writing, I am credibly informed, that at Pithole, a place claiming 10,000 inhabitants, (which, by the way, has only been in existence three months, an unparalleled growth) there are 800 sick, and nearly all the cases are of this same form of disease. In this region there have been more wells sunk than in any other on the same space of ground, and, of course, more gas has escaped and pervaded that region. In Titusville, Shafen, and Oil City, I am informed, there is a good deal of this same sickness, showing to our conclusion, that the gas from carbon oil acts as a poison on the human system. I should be happy to hear from the profession upon this subject.

H. A. SPENCER.

Erie, Pa., Sept. 25th, 1865.

A NEW PERIODICAL has just appeared in Germany, conducted by MAN SCHULTZE, of Boorn, entitled *Archives of Microscopical Anatomy*.

The Surgical Society of Paris has been authorized to assume the title of "Imperial!" *Cui bono?*

## News and Miscellany.

### Pension Examining Surgeons.

The following appointments have been made by the Commissioner of Pensions:

Vermont—GALES B. BULLARD, St. Johnsbury.

Indiana—GEO. A. TORRET, Cannellton.

Tennessee—J. C. CAWOOD, Dandridge.

### Preventive Hygiene.

The Exeter Town Council have divided their body into committees, with the view of making a house-to-house visitation, for the purpose of inspecting the drainage, and promoting the ventilation and cleansing of the dwellings in the various streets and lanes of the city.—*Brit. Med. Journal*.

### New Medical Journals.

Two new medical periodicals have appeared in Italy: *L'Unio de Medica*, published at Reggio, in Calabria, and *La Salute*.

### How to Preserve Vaccine.

Dr. D. PRINCE, of Jacksonville, Ill., recommends, in the *Chicago Med. Journal*, the following method:

"Fill a one or two ounce wide-mouthed bottle half full of freshly exsiccated alum, upon which place the vaccine scab, enveloped in paper; cork and seal with good sealing-wax. The exsiccated alum has a very strong affinity for water, and by this means the scab will be kept dry, the indispensable requisite for its preservation."

### Diminution of Respiratory Activity.

M. EDWARD ROBIN has brought a curious speculation before the Academie des Sciences—viz., the possibility of diminishing the activity of respiration without diminishing the quantity of air entering the circulation. This he professes to accomplish by the administration of large quantities of coffee, or anti-putrid substances, (as tar-water, or even an "arsenical alimentation," etc.) which by their combinations with proteic matters give rise to compounds which are not destructible by oxygen in the moist state. In this way the rapidity of consumption is diminished without injury to the animal economy, and the matters in circulation resisting for a long period, they produce a condition similar to that in which are the inhabitants of warm countries, who are so remarkable for the little aliment they require, and the abstinence they can endure; or the still more remarkable conditions in these respects of animals of variable temperature. This method, the author considers, is capable of the following applications:—1. As a means of diminishing the urgency of respiration so as to render anaesthesia less dangerous. 2. The production of artificial hybernation in mammalia. 3. The induction of fattening without the supply of fat or its mate-

rials. 4. The adjustment of alimentation in hot countries, so as to avoid the effects due to difficulty of respiration in the ascent of mountains, descent of mines, etc. 5. The diminution of the inconveniences of insufficient nourishment.

#### The Sickness of Pregnancy.

We know of no more distressing complaint than the nausea and vomiting of pregnancy—and, although so many "specifics" have been recommended without benefit, yet we always try them as fast as brought to our notice, in the hope that one will really be found. Hence we insert the following, by Dr. CASSELLS, from the *Lancet*:

In the morning, an hour before rising, let the patient drink about three ounces of very strong hot decoction of coffee, and during the day the food must be liquid, taken in small quantities, and often. If this fails, try in conjunction five drops of tincture of iodine in a teaspoonful of cold water every two hours—highly lauded by Dr. CHURCHILL, I think, at least if my memory serves me; so Dr. J. G. WILSON, of Glasgow, told me, when recommending its use in a case which resisted every other mode of treatment, but which was cured at once by a few doses.

Should everything fail to give relief, and all food taken be instantly rejected, what can be done? Nutrient enemata, very concentrated and frequently used, afford the only chance of quieting the irritable stomach. Such a plan may be used for many weeks, and in my hands has never failed to soothe the irritable stomach and continual nausea. After a period of from three or four days to as many weeks, food may again be very cautiously partaken of, and will in the majority of cases be retained without any troublesome symptoms. I have followed the latter plan of treatment in three or four extreme cases, and had no cause to regret doing so, the patients and children not having suffered any injury; while I am positive one patient at least would have died had she not been kept up by the enemata alone for sixteen days, nothing but a small quantity of ice being swallowed during that time.

#### MARRIED.

BELDEN—ORR.—In Whitehall, N. Y., Sept. 5th, by the Rev. L. Kellogg, A. P. Belden, M. D. and Miss Eliza J. Orr, both of this village.

CHURCH—HUDSON.—On Tuesday, Sept. 26, at Christ Church, Poughkeepsie, N. Y., by Rev. Dr. G. J. Geer, Allen S. Church, M. D., of New York city, and Caroline, daughter of the late David Hudson, of Geneva, N. Y.

PRAY—HANSON.—In Great Falls, N. H., Aug. 16, by Rev. E. N. Hidden, Dr. Ezra Pray, U. S. N., and Martha J., daughter of Mr. Hiram Hanson, of Great Falls.

#### DIED.

COOPER.—In New York, on Wednesday, Sept. 27, Edwin Osborne, only son of Dr. James S., and Martha Cooper, aged 15 years, 9 months, and 24 days.

CHAMBERLAIN.—In Bustleton, Pa., on the 25th ult.,

Harry, infant son of Dr. G. J., and Sallie Chamberlain, aged 15 days.

CLARKE.—On Tuesday, Sept. 26, in New York, Mrs. Maria Clarke, relict of the late Dr. Peter Clarke, in the 87th year of her age.

GILMAN.—Suddenly, on Tuesday, Sept. 26, at Middletown, Conn., Chandler R. Gilman, M. D., late of New York.

GRIFFITHS.—Suddenly, by accident, C. G. M. Griffiths, M. D., late Surgeon United States Hospital, Chester, Pa., aged 32 years.

McCOMB.—On Wednesday, June 14, on his way from Shanghai, China, to Japan, David W. McComb, eldest son of Dr. John R. and Margaret S. McComb, of New York.

#### ANSWERS TO CORRESPONDENTS.

Dr. D. C. G., Polk, Pa.—Budd on the Liver, sent by mail, Oct. 2d.

Dr. W. McK., Mount Hope, Ohio.—One set of obstetric Instruments, sent by Express, Sept. 9th.

Dr. D. H. McCord, Centralia, Ill.—Physician's Medicine Chest, sent Sept 30th.

#### American Medical Association.

In consequence of the expense of the publication of Vol. XVI. (1865) of the Transactions, the Committee of Publication have fixed the price at five dollars (\$5). Members who have already paid three dollars (\$3), are requested immediately to forward the additional sum, (\$2). As the number of copies published will be but slightly in excess of the number of subscriptions, those who desire copies should immediately forward the amount either to the Treasurer, Dr. C. WISTER, 1303 Arch street, or to

WM. B. ATKINSON, Permanent Secretary,  
215 Spruce st., Philadelphia.

Sept. 18, 1865.

#### METEOROLOGY.

September	25,	26,	27,	28,	29,	30,	O. 1.
Wind.....	S. W.	N. W.	N. W.	W.	S. W.	W.	W.
Weather.....	Cl'dy.	Clear.	Clear.	Clear.	Clear.	Clear.	Clear.
Depth Rain.....	3-10						
Thermometer.							
Minimum.....	63°	54°	49°	47°	48°	53°	55°
At 8 A. M.....	69	63	59	59	60	56	65
At 12 M.....	75	67	65	69	70	70	69
At 3 P. M.....	76	69	67	68	71	69	67
Mean.....	70.75	63.25	60.	60.75	62.	62.	64.
Barometer.							
At 12 M.....	30.	30.2	30.5	30.4	30.2	30.	29.9
Germantown, Pa.				B. J. LEEDON.			

#### WANTED.

Subscribers having any of the following numbers to spare, will confer a favor, and likewise be credited on their running subscriptions, with such as they may return us.

Vols. I, II, III & IV. All the numbers.

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" VI. Nos. 18, 19, Aug. 3, 10, '61.

" VII. Nos. 1, 2, 6, Oct. 5, 12, Nov. 9, '61; Nos. 10 to 12,

Dec. 7, '61, to March 8, '63.

" VIII. Nos. 17, 18, 19, 22, 25, July 28, Aug. 2, 9, 30, Sept. 6, '62.

" IX. Nos. 6, 7, 8, 13 & 14, 17 & 18, Nov. 8, 15, 22, '63;

Dec. 27, '62, and Jan. 3, '63, Jan. 24 & 31, '63.

" XI. Nos. 1, 4, 5, 7, 11, 21, Jan. 2, 23, 30, Feb. 13, March 13,

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" XII. Nos. 1, 5, 11, 12, 17, July 2, Sept. 10, Oct. 23, 29, '64,

Feb. 4, '65.

We are in pressing need just now of a few copies for new subscribers, of No. 414, Feb. 4, 1865.